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10/10/03

PATENT APPLICATION  
DOCKET NO.: 2869-1001-023

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Richard A. Young and Douglas Young

Application No.: 10/046,649

Group: 1648

RECEIVED

Filed: January 14, 2002

Examiner: Stacy S. Brown

OCT 17 2003

Confirmation No.: 3487

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Title: STRESS PROTEINS AND USES THEREFOR

CERTIFICATE OF MAILING OR TRANSMISSION	
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10.10.03	<i>[Signature]</i>
Date	Signature
Verine Crump	
Typed or printed name of person signing certificate	

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

10/16/2003 HROCHA1 00000011 10046649

Sir:

01 FC:1006

180.00 OP

This Information Disclosure Statement is submitted:

☐ under 37 CFR 1.129(a), or

(First/Second submission after Final Rejection)

☐ under 37 CFR 1.97(b), or

(Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).

☒ under 37 CFR 1.97(c) together with either:

☐ a Statement under 37 CFR 1.97(e), as checked below, or

☒ a \$180.00 fee under 37 CFR 1.17(p), or

(After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)

☐ under 37 CFR 1.97(d) together with:

☐ a Statement under 37 CFR 1.97(e), as checked below, and

☐ a \$180.00 fee under 37 CFR 1.17(p), or

(Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)

☐ under 37 CFR 1.97(i):

Applicant requests that the IDS and cited reference(s) be placed in the application filewrapper.

(Filed after payment of issue fee)

Statement Under 37 CFR 1.97(e)

- ☐ Each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or
- ☐ No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Statement Under 37 CFR 1.704(d) (Patent Term Adjustment)

Applies to original applications (other than design) filed on or after May 29, 2000

- ☐ Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.
- ☒ Enclosed herewith is form PTO-1449:
  - ☒ Copies of the cited references are enclosed.
    - ☐ Since this application was filed after June 30, 2003, copies of issued U.S. patents and published U.S. applications are not required and are not being provided.
  - ☐ Copies of the cited references are enclosed except those entered in prior application, U.S. Application No. [ ], to which priority under 35 U.S.C. 120 is claimed. [The earlier application contains copies of the cited references.]
  - ☐ The listed references were cited in the enclosed International Search Report in a counterpart foreign application.
- ☒ The "concise explanation" requirement (non-English references) for reference(s) **AN4** and **AY8** under 37 CFR 1.98(a)(3) is satisfied by:
  - ☐ the explanation provided on the attached sheet.
  - ☐ the explanation provided in the Specification.
  - ☐ submission of the enclosed International Search Report.
  - ☐ submission of the enclosed English-language version of a foreign Search Report and/or foreign Office Action.
- ☒ the enclosed English language abstract.

☒ Applicant requests that the following applications be considered:

Examiner's  
Initials

- \_\_\_\_ U.S. Patent Application No. 08/461,720, by Richard A. Young and Douglas Young, filed June 5, 1995, Docket No.: 2869.1001-002 (ABANDONED)
- \_\_\_\_ U.S. Reexamination Control No. 90/006,418, by Richard A. Young, filed October 22, 2002, Docket No.: ANT-1 (2869.1001-040)
- \_\_\_\_ U.S. Reexamination Control No. 90/006,419, by Richard A. Young, filed October 22, 2002, Docket No.: ANT-2 (2869.1001-041)

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Examiner

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Date

- ☐ A copy of each above-cited application, including the current claims, is enclosed.
- ☐ A copy of each above-cited application, including the current claims, is enclosed, except those entered in prior application, U.S. Application No. [ ], to which priority under 35 U.S.C. 120 is claimed.

The Examiner is requested to return a copy of the above list of pending applications indicating which references were considered with the next office communication.

It is requested that the information disclosed herein be made of record in this application.

Method of payment:

- ☒ A check for the fee noted above is enclosed. A copy of this Statement is enclosed.
- ☐ Please charge Deposit Account 08-0380 in the amount of \$[ ]. A copy of this Statement is enclosed.
- ☒ Please charge any deficiency in fees and credit any overpayment to Deposit Account 08-0380.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By


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Dated:

*October 10, 2003*

PTO-1449 REPRODUCED		ATTORNEY DOCKET NO. 2869.1001-023		APPLICATION NO. 10/046,649	
 INFORMATION DISCLOSURE CITATION IN AN APPLICATION October 10, 2003 (Use several sheets if necessary)		APPLICANT Richard A. Young, <i>et al.</i>			
		FILING DATE January 14, 2002		CONFIRMATION NO. 3487	GROUP 1648

## U.S. PATENT DOCUMENTS

EXAM- INER INI- TIAL	REF. NO.	DOCUMENT NUMBER	ISSUE DATE / PUBLICATION DATE	NAME
	AA	4,716,038	29-Dec-87	Stanford, et al.
	AB	4,724,144	9-Feb-88	Rook, et al.
	AC	5,114,844	19-May-92	Cohen, et al.
	AD	5,504,005	2-Apr-96	Bloom, et al.
	AE	6,335,183 B1	1-Jan-02	Young
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	AH	5,580,563 A	3-Dec-96	Tam, et al.
	AI	6,482,614 B1	19-Nov-02	Young
	AJ	4,557,931	10-Dec-85	Irie, et al.
	AK	6,030,618	29-Feb-00	Srivastava
	AA2	6,455,493 B1	24-Sep-02	Wallen, et al.
	AB2	6,403,099 B1	11-Jun-02	Rappuoli, et al.
	AC2	US-2002-0146426-A1	10-Oct-02	Huang, et al.
	AD2	US-2001-0005713-A1	28-Jun-01	Young
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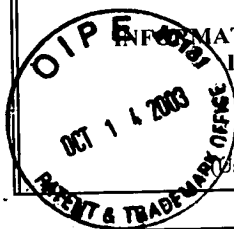
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## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES NO	
	AL	WO88/00974	11-Feb-88	PCT		
	AM	WO85/05034	21-Nov-85	PCT		
	AN	WO88/05823	11-Aug-88	PCT		
	AO	WO88/06591	7-Sep-88	PCT		
	AP	WO91/02542	7-Mar-91	PCT		
	AQ	WO91/15572	17-Oct-91	PCT		
	AL2	WO 92/08484	29-May-92	PCT		
	AM2	WO 92/08488	29-May-92	PCT		
	AN2	0 262 710	7-Sep-87	EPO		
	AO2	0 322 990	5-Jul-89	EPO		
	AP2	2 251 186	1-Jul-92	Great Britain		
	AQ2	WO 89/12455	28-Dec-89	PCT		
	AL3	WO 93/17712	16-Sep-93	PCT		
	AM3	WO 94/03208	17-Feb-94	PCT		
	AN3	WO 90/15873	27-Dec-90	PCT		
	AO3	WO 95/31994	30-Nov-95	PCT		
	AP3	WO 95/24923	21-Sep-95	PCT		
	AQ3	WO 94/29459	22-Dec-94	PCT		
	AL4	WO 97/06821	27-Feb-97	PCT		
	AM4	WO 98/23735	4-Jun-98	PCT		
	AN4	WO 97/26910	31-Jul-97	PCT		
	AO4	WO 96/10421	11-Apr-96	PCT		
	AP4	WO 95/24923	21-Sep-95	PCT		
	AQ4	WO 98/35705	20-Aug-98	PCT		
	AL5	WO 99/07860	18-Feb-99	PCT		
	AM5	WO 01/51081	19-Jul-01	PCT		

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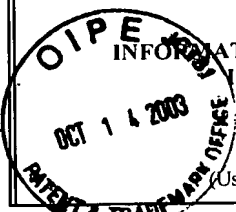
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**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

AR	Lamb, J.R., et al., "Stress Proteins may Provide a Link Between the Immune Response to Infection and Autoimmunity", <i>Int'l. Immun.</i> , 1(2):191-196 (1989).
AS	Young, R. A., "Stress Proteins and Immunology," <i>Annu. Rev. Immunol.</i> , 8:401-420 (1990).
AT	Lussow, A. R. et al., "Mycobacterial heat-shock proteins as carrier molecules," <i>Eur. J. Immunol.</i> , 21:2297-2302 (1991).
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AW	Del Giudice, G. D., et al., "Priming to Heat Shock Proteins in Infants Vaccinated against Pertussis," <i>J. Immunol.</i> , 150(5):2025-2032 (1993).
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AY	Miller, A. et al., "Immunotherapy in autoimmune diseases," <i>Curr. Opinion in Immun.</i> , 3:936-940 (1991).
AZ	Nadler, S. G. et al., "Interaction of the Immunosuppressant Deoxyspergualin with a Member of the Hsp70 Family of Heat Shock Proteins," <i>Science</i> , 258:484-486 (1992).
AR2	Elias, D. et al., "Induction and therapy of autoimmune diabetes in the non-obese diabetic (NOD/Lt) mouse by a 65-kDa heat shock protein," <i>Proc. Natl. Acad. Sci. USA</i> , 87:1576-1580 (1990).
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AU2	Husson, R. N. and Young, R.A., "Genes for the major protein antigens of Mycobacterium tuberculosis: The etiologic agents of tuberculosis and leprosy share an immunodominant antigen," Proc. Natl. Acad. Sci. USA, 84:1679-1683 (1987).
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AR3	Thole, J.E.R., et al., "Antigenic relatedness of a strongly immunogenic 65 kDa mycobacterial protein antigen with a similarly sized ubiquitous bacterial common antigen", Microbial Pathogenesis, 4:71-83 (1988).
AS3	van Eden, W., et al., "Cloning of the mycobacterial epitope recognized by T lymphocytes in adjuvant arthritis", Nature, 331(14):171-173 (1988).
AT3	Del Guidice, G., et al., "Heat shock proteins as "super"-carriers for sporozoite peptide vaccines", Research in Immunol., 162:703-707 (1991).
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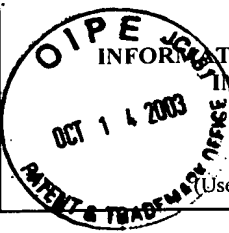
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AY3	Suzue, K., et al., "Heat shock fusion proteins as vehicles for antigen delivery into the major histocompatibility complex class I presentation pathway," Proc. Natl. Acad. Sci. USA, 94(24):13146-13151 (1997).
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AS4	Noll, A. and Autenrieti, I.B., "Immunity against Yersinia enterocolitica by Vaccination with Yersinia HSP60 Immunostimulating Complexes or Yersinia HSP60 plus Interleukin-12," Infect. & Immun., 64:2955-2961 (1996).
AT4	Ferrero, R.L. et al., "The GroES homolog of Helicobacter pylori confers protective immunity against mucosal infection in mice," Proc. Natl. Acad. Sci. USA, 92:6499-6503 (1995).
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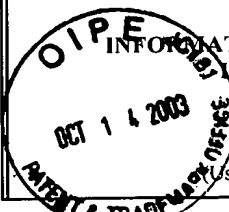
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**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

AZ4	Könen-Waisman, S. et al., "Self and Foreign 60 Kilodalton Heat Shock Protein T Cell Epitope Peptides Serve As Immunogenic Carriers for a T Cell-Independent Sugar Antigen," J. Immunol., 154:5977-5985 (1995).
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AY5	Welch, W.J. and Feramisco, J.R., "Purification of the Major Mammalian Heat Shock Proteins," J. Biol. Chem. 257(24):14949-14959 (1982).
AZ5	Davis, B.D., et al., Microbiology, second edition, Harper & Row, Publishers, pp. 600 & 622.
AR6	Doherty, et al., Evasion of host immune responses by tumours and viruses, "Vaccines against virally induced cancers", Wiley, Chichester (Ciba Foundation Symposium 187), pp. 245-260. See page 245, Abstract.
AS6	Hird, et al., Immunotherapy with Monoclonal Antibodies, Genes and Cancer, Edited by Carney, et al., pp. 183-189, see page 185, first paragraph.

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## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AT6	Oettgen, H.F. and Old, L.J., "Chapter 6: The History of Cancer Immunotherapy." In Biologic Therapy of Cancer, De Vita, V.T., Hellman, S. and Rosenberg, S.A., eds., (London: J.B. Lippincott) pp. 98-103 (1991).
AU6	Hudson, C.N., et al., "Active Specific Immunotherapy for Ovarian Cancer," The Lancet, 2:877-879 (1976, October 23).
AV6	Sparks, F.C., et al., "Immunology and Adjuvant Chemoimmunotherapy of Breast Cancer," Arch Surg, 111:1057-1062 (1976, October).
AW6	Humphrey, L.J., et al., "Adjuvant Immunotherapy for Melanoma," J. of Sur. Oncol., 25:303-305 (1984).
AX6	Hughes, L.E., et al., "A Study in Clinical Cancer Immunotherapy," Cancer, 26:269-278 (1970, August).
AY6	Cassell, W.A., et al., "A Phase II Study on the Postsurgical Management of Stage Malignant Melanoma With a Newcastle Disease Virus Oncolysate," Cancer, 52:856-860 (1983, September).
AZ6	Cassell, W.A., et al., "Viral Oncolysate in the Management of Malignant Melanoma, I. Preparation of the Oncolysate and Measurement of Immunologic Responses" Cancer, 40:672-679 (1977, August).
AR7	Murray, D.R., et al., "Viral Oncolysate in the Management of Malignant Melanoma, II. Clinical Studies" Cancer, 40:680-686 (1977, August).
AS7	Srivastava, P.K., and Das, M.R., "The Serologically Unique Cell Surface Antigen of Zajdela Ascitic Hepatoma is Also Its Tumor-Associated Transplantation Antigen," Int. J. Cancer, 33:417-422 (1984).
AT7	Ullrich, S.J., et al., "A Mouse Tumor-Specific Transplantation Antigen is a Heat Shock-Related Protein," Proc. Natl. Acad. Sci., USA, 83:3121-3125 (1986, May).
AU7	Srivastava, P.K., et al., "Tumor Rejection Antigens of Chemically Induced Sarcomas of Inbred Mice," Proc. Natl. Acad. Sci., USA, 83:3407-3411 (1986, May).
AV7	Palladino, M.A., et al., "Expression of a Shared Tumor-Specific Antigen by Two Chemically Induced BALB/c Sarcomas," Cancer Research, 47:5074-5079 (1987, October).
AW7	Srivastava, P.K. and Old, L.J., "Individually Distinct Transplantation Antigens of Chemically Induced Mouse Tumors," Immunology Today, 9:78-83 (1988, March).

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AX7	Srivastava, P.K. and Maki, R. G., "Stress-Induced Proteins in Immune Response to Cancer," Curr. Top. Microbiol. Immunol., 167:109-123 (1991).
AY7	Falk, R.E., et al., "Cell Mediated Immunity to Human Tumors," Arch. Surg., 107:261-265 (1973, August)
AZ7	McCulloch, P.B., et al., "Recurrent Malignant Melanoma: Effect of Adjuvant Immunotherapy on Survival," Can. Med. Assoc. J., 117:33-36 (1977, July).
AR8	Hagbabin, M., et al., "Immunotherapy with Oral BCG and Serial Immune Evaluation in Childhood Lymphoblastic Leukemia Following Three Years of Chemotherapy," Cancer, 46:2577-2586 (1980, December).
AS8	Pinsky, C.M., et al., "Intravesical Administration of Bacillus Calmette-Guérin in Patients With Recurrent Superficial Carcinoma of the Urinary Bladder: Report of a Prospective, Randomized Trail," Cancer Treat. Rep., 69:47-53 (1985, January).
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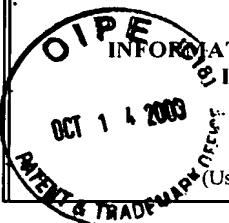
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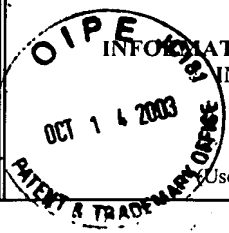
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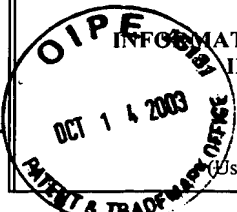
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PTO-1449 REPRODUCED

ATTORNEY DOCKET NO.  
2869.1001-023APPLICATION NO.  
10/046,649INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION

October 10, 2003

(Use several sheets if necessary)

APPLICANT

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FILING DATE

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